

Bathtub cleaning brush

U.S. Patent Application of:

Stephen Hillenbrand.

"Express mail" mailing label number

Date of Deposit: _____

I hereby certify that this correspondence, including the attachments listed on the accompanying New Utility Patent Application Transmittal, is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.

(Typed or printed name of person mailing paper or fee)

(Signature of person mailing paper or fee)

Title of the Invention

Bathtub cleaning brush

Cross Reference to Related Applications

Not Applicable

Statement Regarding Federally Sponsored Research or Development

Not Applicable

Description of Attached Appendix

Not Applicable

Background of the Invention

This invention relates generally to the field of cleaning brushes and more specifically to a bathtub cleaning brush.

Cleaning brushes of many kinds have been available in the market place for many years. Many of these brushes employ a handle, a bristle retaining member and a plurality of bristles.

The shape of the bristle retaining head and attached bristles as well as the design of the handle portion vary with the intended end use.

Some brushes and sponge mop devices have been designed to clean the surfaces of bathtubs. They tend to have long handles so that the user can reach all parts of the tub without necessarily getting into the tub.

However, there are deficiencies in existing bathtub cleaning brush designs in that they do not have the flexibility to quickly adjust angles as the user passes the brush from one side surface to another to the bottom surface. Additionally, currently existing brushes do not have the ability to provide an effective scrubbing action as well as an effective soap holding ability.

Brief Summary of the Invention

The primary object of the invention is to provide a cleaning brush for bathtubs and the like that can easily adjust to the contours of a non linear surface.

Another object of the invention is to provide a bathtub cleaning brush that includes two bristle types, one that is designed to more easily scrub compound curved surfaces while is capable of retaining liquid soap.

Other objects and advantages of the present invention will become apparent from the following descriptions, taken in connection with the accompanying drawings, wherein, by way of illustration and example, an embodiment of the present invention is disclosed.

In accordance with a preferred embodiment of the invention, there is disclosed Bathtub cleaning brush comprising: an elongate handle, a Y shaped joint, a U shaped joint, a bristle retaining member having an elongate partial cylindrical shape and having a flat bottom portion, a plurality of soft bristles, a plurality of stiff bristles, said U shaped joint centrally pinned to said Y shaped joint, said U shaped joint centrally pinned to said bristle retaining member, said bristles fixed to said elongate cylindrical shape in a radial manner, said Y joint and said U joint creating a universal joint that allows said

bristle retaining member to pivot in any direction, and said bristles arranged in said bristle retaining member so that said stiff bristles alternate with said soft bristles to provide the combination of scrubbing properties and soap holding properties.

Brief Description of the Drawings

The drawings constitute a part of this specification and include exemplary embodiments to the invention, which may be embodied in various forms. It is to be understood that in some instances various aspects of the invention may be shown exaggerated or enlarged to facilitate an understanding of the invention.

Figure 1 is a perspective view of the invention.

Figure 2 is a partial side view of the invention.

Figure 3 is a section view of the bristle head portion of the invention

Figure 4 is a perspective view of the bristle head portion of the invention.

Detailed Description of the Preferred Embodiments

Detailed descriptions of the preferred embodiment are provided herein. It is to be understood, however, that the present invention may be embodied in various forms. Therefore, specific details disclosed herein are not to be interpreted as limiting, but rather as a basis for the claims and as a representative basis for teaching one skilled in the art to employ the present invention in virtually any appropriately detailed system, structure or manner.

Referring now to Figure 1 we see a perspective view of the bathtub cleaning brush of the present invention. Elongate handle 2 terminates at one end in a Y shaped joint 6. A U shaped joint 10 is centrally pinned 8 to the end of each leg of the Y 6. The U shaped joint 10 is pinned to the bottom of the bristle retaining head 18 as shown in Figure 2 and 3 by dotted circular line 22. This joint configuration allows the bristle head 18 to pivot forward and backward as shown by arrows 80, 82 and from side to side as shown by arrows 30, 32. The bristles 12 are arranged in a radial fashion as shown in Figure 2. The combination of the universal joint formed by the Y member and the U member, as well as the radial shape of the bristles create a configuration that makes it easy for a user to clean all surfaces of a conventional bathtub without needing to change the angle of the handle in the process. The bristles are unique in that soft polyester bristles 14 are alternated with stiff nylon bristles 16 so that the brush 12 combines the properties of soap retaining bristles 14 along with the superior scrubbing qualities of the stiffer nylon bristles 16. Figure 3 shows a section view of the bristle portion 12 as indicated by section arrow 90 shown in Figure 2. The bristles 12 are inserted into

apertures 36 located on the surface of the bristle retaining member 18. Notice that the bristles 14, and 16 alternate with each other. Figure 4 and Figure 1 shows that the bristles 14, 16 alternate from row to row forming a radial checkerboard configuration. Figure 1 also shows an embodiment of the handle 2 where it is comprised of a fixed length 3, a locking ring 4 and a telescoping length 5 so that the handle length can be adjusted in a standard manner to increase ease of use.

While the invention has been described in connection with a preferred embodiment, it is not intended to limit the scope of the invention to the particular form set forth, but on the contrary, it is intended to cover such alternatives, modifications, and equivalents as may be included within the spirit and scope of the invention as defined by the appended claims.